

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 6. (canceled)

7. (currently amended) A pharmaceutical composition comprising the polypeptide
having the following sequence of amino acids

Ser-Met-Arg-Glu-Arg

(SEQ ID NO:4)

and a pharmaceutically acceptable carrier, filler or excipient.

8. (canceled).

9. (canceled).

10. (currently amended) A pharmaceutical composition comprising the polypeptide
having the following sequence of amino acids

Arg-Glu-Arg

(SEQ ID NO:9)

and a pharmaceutically acceptable carrier, filler or excipient.

11. (canceled).

12. (withdrawn) A method of treatment of a neurodegenerative disease in an animal,
comprising:

identifying an animal suffering or potentially suffering from a neurodegenerative disease;
and

administering to the animal an amount of a compound according to claim 1 effective to
treat the neurodegenerative disease.

13. (withdrawn) A method of treatment of a neurodegenerative disease in an animal, comprising:

identifying an animal suffering or potentially suffering from a neurodegenerative disease;
and

administering to the animal an amount of a compound according to claim 5 effective to treat the neurodegenerative disease.

14. (withdrawn) A method of treatment of a neurodegenerative disease in an animal, comprising:

identifying an animal suffering or potentially suffering from a neurodegenerative disease;
and

administering to the animal an amount of a pharmaceutical composition according to claim 7 effective to treat the neurodegenerative disease.

15. (withdrawn) A method of treatment of a neurodegenerative disease in an animal, comprising:

identifying an animal suffering or potentially suffering from a neurodegenerative disease;
and

administering to the animal an amount of a pharmaceutical composition according to claim 8 effective to treat the neurodegenerative disease.

16. (withdrawn) A method of treatment of a neurodegenerative disease in an animal, comprising:

identifying an animal suffering or potentially suffering from a neurodegenerative disease;
and

administering to the animal an amount of a pharmaceutical composition according to claim 9 effective to treat the neurodegenerative disease.

17. (withdrawn) A method of treatment of a neurodegenerative disease in an animal, comprising:

identifying an animal suffering or potentially suffering from a neurodegenerative disease;

and

administering to the animal an amount of the compound

Arg-Glu-Arg

(SEQ ID No: 9)

effective to treat the neurodegenerative disease.

18. (withdrawn) A method of treatment of a neurodegenerative disease in an animal, comprising:

identifying an animal suffering or potentially suffering from a neurodegenerative disease;

and

administering to the animal an amount of a pharmaceutical composition according to claim 10 effective to treat the neurodegenerative disease.

19. (withdrawn) A method of treatment of a neurodegenerative disease in an animal, comprising:

identifying an animal suffering or potentially suffering from a neurodegenerative disease;

and

administering to the animal an amount of a pharmaceutical composition according to claim 11 effective to treat the neurodegenerative disease.

20. (withdrawn) A method according to claim 12, in which the animal is a human and the neurodegenerative disease is Alzheimer's disease.

21. (withdrawn) A method according to claim 13, in which the animal is a human and the neurodegenerative disease is Alzheimer's disease.

22. (withdrawn) A method according to claim 14, in which the animal is a human and the neurodegenerative disease is Alzheimer's disease.

23. (withdrawn) A method according to claim 15, in which the animal is a human and the neurodegenerative disease is Alzheimer's disease.

24. (withdrawn) A method according to claim 16, in which the animal is a human and the neurodegenerative disease is Alzheimer's disease.

25. (withdrawn) A method according to claim 17, in which the animal is a human and the neurodegenerative disease is Alzheimer's disease.

26. (withdrawn) A method according to claim 18, in which the animal is a human and the neurodegenerative disease is Alzheimer's disease.

27. (withdrawn) A method according to claim 19, in which the animal is a human and the neurodegenerative disease is Alzheimer's disease.

28. (withdrawn) A method of producing a cognitive enhancement effect in an animal, comprising:

providing an animal in which said effect is to be produced and administering to the animal an amount of a compound according to claim 1 effective to produce the cognitive enhancement.

29. (withdrawn) A method of producing a cognitive enhancement effect in an animal, comprising:

providing an animal in which said effect is to be produced and administering to the animal an amount of a compound according to claim 5 effective to produce the cognitive enhancement.

30. (withdrawn) A method of producing a cognitive enhancement effect in an animal, comprising:

providing an animal in which said effect is to be produced and administering to the animal an amount of a pharmaceutical composition according to claim 7 effective to produce the cognitive enhancement.

31. (withdrawn) A method of producing a cognitive enhancement effect in an animal, comprising:

providing an animal in which said effect is to be produced and administering to the animal an amount of a pharmaceutical composition according to claim 8 effective to produce the cognitive enhancement.

32. (withdrawn) A method of producing a cognitive enhancement effect in an animal, comprising:

providing an animal in which said effect is to be produced and administering to the animal an amount of a pharmaceutical composition according to claim 9 effective to produce the cognitive enhancement.

33. (withdrawn) A method of producing a cognitive enhancement effect in an animal, comprising:

providing an animal in which the effect is to be produced; and
administering to the animal an amount of the compound

Arg-Glu-Arg

(SEQ ID No: 9)

effective to produce the cognitive enhancement.

34. (withdrawn) A method of producing a cognitive enhancement effect in an animal, comprising:

providing an animal in which said effect is to be produced and administering to the animal an amount of a pharmaceutical composition according to claim 10 effective to produce the cognitive enhancement.

35. (withdrawn) A method of producing a cognitive enhancement effect in an animal, comprising:

providing an animal in which said effect is to be produced and administering to the animal an amount of a pharmaceutical composition according to claim 11 effective to produce the cognitive enhancement.